

# DØ Physics – The Next Several Months

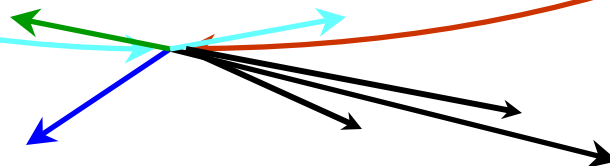
Boaz Klima  
Fermilab



All DØ Meeting



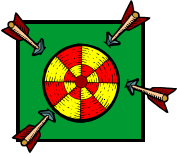
Apr. 12, 2002





# Winter Conferences

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Results from Run 2 were shown for the first time

## Our message

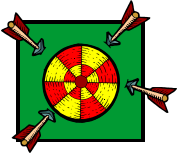
- Almost all detectors are operational
- Most of those produce data as (or close to what's) expected
- In most cases we understand what needs to be studied/done/developed to get us to the "promised land"

Everything was (really!) Preliminary

We are on the way to producing exciting physics



# Performance



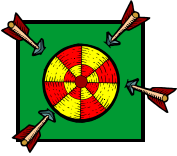
- All our **DØ reps/speakers** did a **very nice job**
  - La Thuile (Sabine Crepe-Renaudin) -  
<http://www.pi.infn.it/lathuile/2002/talks/crepe.pdf>
  - Moriond/EW (Marco Verzocchi) -  
[http://www-d0.fnal.gov/~mverzocc/d0\\_private/talks/conferences/moriond.pdf](http://www-d0.fnal.gov/~mverzocc/d0_private/talks/conferences/moriond.pdf)
  - Moriond/QCD (Aurelio Juste) -  
<http://www-d0.fnal.gov/Run2Physics/public/Moriond02.pdf>
- According to an elder statesman ("unbiased source") they "outshone the competition"
- It's a strong start - focus on the main issues
- Obviously behind on tracking, **b** ID,  **$\tau$**  ID
- Need even stronger performances at DPF, ICHEP,...

Material + Presentation



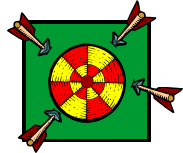
... in the same department of good news

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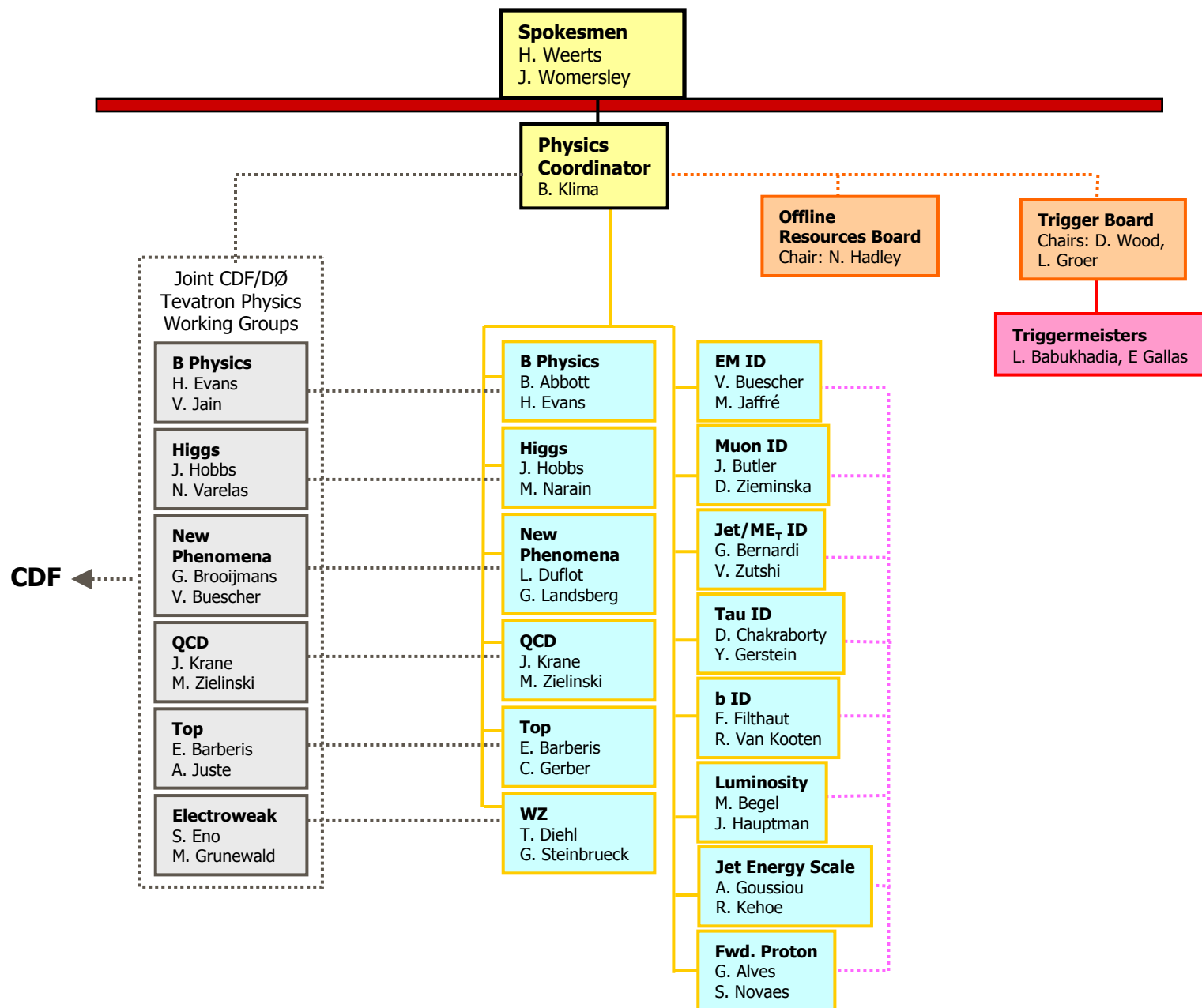
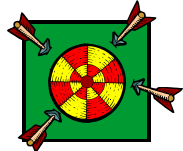


- A grad-student, which we met and talked to last year at Moriond, is now applying for a post-doc position at DØ
- According to him  
"the rumors around my experiment are that DØ is a much better experiment (than CDF) to go to if you are young and looking to take a leadership role on something"

We know this - now others know too

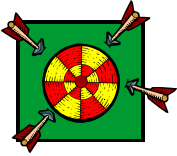


- Editorial Boards for Run 2 Physics
  - Will be formed soon - one board per physics group
  - Will operate for the next 6 months or so
  - Later in 2002 - one board per physics analysis (a la Run 1)
- Trigger List
  - Currently running global\_CalMuon-5.01
  - No change unless a major system improves
  - Candidates for upgrade: L1CAL, L3MUO, L2.
- DPF02 ( $\sim 10\text{pb}^{-1}$ )
  - Stuff from "Material Approved for Conferences"
  - Results approved by ID/Physics groups (<May 4) will be considered
- Tevatron (DØ/CDF)working groups (6)
  - Membership selected in both experiments
  - Some are already working, some will start very soon





# The next several months



## "Getting ready for ICHEP 2002"

- **May 1** - certified object IDs ( $e$ ,  $\mu$ , jet,  $\cancel{E}_T$ , JES,  $b$ ,  $\tau$ , ...)
- **June 1** - complete data taking for ICHEP
- June 8 - complete data processing for ICHEP
- June 15 - complete Express Stream re-processing
- **July 1** - Plots/results approved by Physics groups
- **July 8** - Rehearsal of talks
- **July 12** - EB approval of analysis and talks
- July 24, 2002 - 1<sup>st</sup> day of ICHEP

## Hardware/Software potential upgrades\*

- May 1 - CFT tracking w stereo RECO p11 on the farm(s)  
L3MUO operational
- May 15 - L1CAL  $|\eta| < 1.6$   
L2 operational  
Certified alignment  
**Certified tracks/vertices**

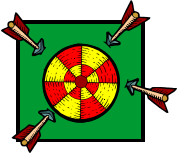
} Oklahoma Workshop

\* - beyond commissioning



# Conclusions

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- Tremendous progress made over the last several months
- Major accomplishments; seeds for future
- We are beginning to see signals of the physics we're interested in
- Still lots to do
- The next several months are going to be very exciting

Let's get ready to produce first Physics results